

**IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
SHERMAN DIVISION**

WAPP TECH LIMITED PARTNERSHIP  
and WAPP TECH CORP.,

Plaintiffs,

v.

SEATTLE SPINCO, INC. ET AL.,

Defendants.

C.A. No. 4:18-cv-00469-ALM

**JURY TRIAL DEMANDED**

WAPP TECH LIMITED PARTNERSHIP  
and WAPP TECH CORP.,

Plaintiffs,

v.

WELLS FARGO & COMPANY,

Defendant.

C.A. No. 4:18-cv-00501-ALM

**JURY TRIAL DEMANDED**

WAPP TECH LIMITED PARTNERSHIP  
and WAPP TECH CORP.,

Plaintiffs,

v.

BANK OF AMERICA CORPORATION,

Defendant.

C.A. No. 4:18-cv-00519-ALM

**JURY TRIAL DEMANDED**

**DEFENDANTS' CLAIM CONSTRUCTION BRIEF**

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## I. INTRODUCTION

For *every* disputed term, Wapp argues that no construction is necessary and that the “plain and ordinary meaning” should apply. But Wapp never—not once—identifies the “plain and ordinary meaning” of any of the disputed terms. By not taking a position, other than to attack Defendants’ constructions, Wapp hopes to leave the question of what the disputed terms mean unanswered and thereby provide itself flexibility as the case proceeds to expert discovery and trial. To allow Wapp to do so, however, turns the claim construction process on its head and runs afoul of the Federal Circuit’s mandate that “[w]hen the parties present a fundamental dispute regarding the scope of a claim term it is the court’s duty to resolve it.” *O2 Micro Int’l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1362 (Fed. Cir. 2008).

As explained below, and as Wapp’s opening brief makes apparent, the parties fundamentally dispute the scope of the specific claim terms. Indeed, even Wapp characterizes the terms as “disputed.” C.A. No. 4:18-cv-00469, Dkt. 154 at 1 (Wapp’s claim construction briefs are identical across the three cases; for simplicity, Defendants refer to Wapp’s 469 filing throughout this brief). Resolving these disputes is the very purpose of claim construction. *O2 Micro*, 521 F.3d at 1362 (“Claim construction is a matter of resolution of disputed meanings and technical scope, to clarify and when necessary to explain what the patentee covered by the claims, for use in the determination of infringement.”) (quoting *U.S. Surgical Corp. v. Ethicon, Inc.*, 103 F.3d 1554, 1568 (Fed. Cir. 1997)); *Eon Corp. IP Holdings v. Silver Spring Networks*, 815 F.3d 1314, 1319 (Fed. Cir. 2016) (holding “the court did not resolve the parties’ dispute by instructing the jury that the claims should be given their plain and ordinary meaning. . . . This was legal error.”). Wapp should not be permitted to skip this necessary step.

Next, Wapp’s statement that the “plain and ordinary meaning” should apply does not resolve the parties’ disputes. Where a dispute exists, through the claim construction process, the

Court determines the “ordinary and customary meaning” according to one of skill in the art at the time of the invention. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313–14 (Fed. Cir. 2005) (en banc); *Golden Bridge Tech., Inc. v. Apple, Inc.*, 758 F.3d 1362, 1365 (Fed. Cir. 2014) (“Claim terms are generally given their plain and ordinary meanings to one of skill in the art when read in the context of the specification and prosecution history.”). While Wapp avoids identifying the plain meaning of the disputed terms, Defendants have proposed constructions that reflect the plain meanings, and do so based on the specifications and prosecution histories of the asserted patents. Wapp’s vacuous “plain and ordinary meaning” argument, which ignores the patents’ specifications, says nothing and should be rejected. Because Wapp has refused to advance any constructions at all, respectfully, the Court should adopt the constructions proposed by Defendants.

## **II. THE ASSERTED PATENTS AND THE TECHNOLOGICAL BACKGROUND**

Wapp accuses Defendants of infringing certain claims of three related patents: U.S. Patent Nos. 8,924,192, 9,298,864, and 9,971,678. All of the patents originate from a provisional application filed on June 10, 2005, and all list Donovan Poulin as the sole inventor.

In their Background, the asserted patents report that “nearly 700 million new mobile devices will be shipped in 2005, with a new handset model being launched every other day.” ’864 patent at 1:20–22.<sup>1</sup> This proliferation, the patents assert, demanded that “applications designed to run on these mobile devices also sustain rapid development.” *Id.* at 1:22–24. According to the patents, application development “require[d] real-time testing of the application on all applicable devices.” *Id.* at 1:37–39. The patents explain that testing on all applicable devices was required

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<sup>1</sup> Wapp asserts in a footnote that the “’864 patent includes the full specifications of the other two asserted patents other than the claims.” Dkt. 154 at 1 n.1. This is not true. The ’864 patent’s specification does not contain the complete specifications of the other two patents. However, for ease of reference, Defendants also generally cite to the ’864 patent where there are no substantive differences between the disclosures of the asserted patents.

because each device could have different “resources, such as processor, memory, graphics, and networking.” *Id.* at 1:34–41. An application might work on one device but crash on another, due to differences in the resources available to each device. *Id.* at 1:45–50. The patents allege that, at the time of the alleged invention, the only way to test how the application would perform on a particular device was to “transfer the application to the device and play it.” *Id.* at 1:57–60. The patents contend that “[t]his transferring and testing process [was] time-consuming and therefore costly for the application author.” *Id.* at 2:1–2.

The patents purport to solve this time-consuming and costly problem: Rather than load the application onto many different physical device models to test how the application would perform (*id.* at 1:57–60), the patents disclose **emulating** the various mobile devices on the developer’s desktop computer and testing the application on the **emulated** version of the device. *Id.* at 2:11–47. The patents teach that the application developer can purchase a subscription that provides the developer with data representing the mobile devices to be emulated (*id.* at 10:25–36) and thereby provides the developer with access to emulated versions of existing and new mobile devices. *Id.* at 10:40–50, 13:34–42.

Using these emulators, the patents describe monitoring the emulated mobile device’s resources (*e.g.*, processor speed and memory) as the application plays on the emulated device. *Id.* at 8:62–9:22. By monitoring the application’s use of the resources of the mobile device against the total available resources of the mobile device, the patents teach that the developer can identify where the application’s resource needs exceed the available resources of the mobile device, thereby causing the mobile device to crash, or “CAPOUT.” *Id.* at 21:9–30. Thus, the patents describe a “profiler” “that determines or estimates mobile device resource utilization by an

application running on [a] mobile device” (*id.* at 3:60–62) and a “profile data display window” that displays a timeline of the application’s utilization of mobile device resources (*id.* at 7:31–35).

Finally, the patents describe testing how the application would run on the emulated mobile device when the emulated mobile device is connected to a simulated wireless network. *Id.* at 9:60–10:1, 10:8–16. The patents explain, for example, that as the application plays within the emulated mobile device, the effects of the mobile device interacting with a wireless network are simulated such that the profile data display window shows resource availability and utilization that includes interaction with the wireless network. *Id.* at 10:60–65. Interactions with the network include events such as receiving a message or an incoming call (*id.* at 11:11–13); because these events consume some of the mobile device’s resources, the resources available to the application are reduced (*id.* at 11:2–6). The patents refer to these events as “network characteristics,” which the simulator controls as “scripted events” (*e.g.*, cell tower identification), “consumer events” (*e.g.*, checking email), and “incoming events” (*e.g.*, phone calls). *Id.* at 11:51–58. As with the emulated mobile device, the patents teach purchasing a simulator of the wireless network. *Id.* at 12:64–67.

### III. DISPUTED TERMS

#### A. Preamble Limitations

Term	Defendants’ Construction	Wapp’s Construction
“system for testing an application for a mobile device” <sup>2</sup>	“system that mimics the operation of a real-world mobile device to enable the evaluation of a program designed to run on that real-world mobile device”	No construction necessary
“system for developing an application for a mobile device” <sup>3</sup>	“system that mimics the operation of a real-world mobile device to enable the writing of a program designed to run on that real-world mobile device”	No construction necessary

<sup>2</sup> ’678 Patent at Cls. 1, 26, 45; ’864 Patent at Cl. 1.

<sup>3</sup> ’192 Patent at Cl. 1.



**1. The Specification and Claims Confirm that the Preamble Is Limiting and the Purported Invention Relates to Testing Applications on an *Emulated* Device**

Whether to treat a preamble as limiting is a determination “resolved only on review of the entire[ ] . . . patent to gain an understanding of what the inventors actually invented and intended to encompass by the claim.” *Corning Glass Works v. Sumitomo Electric U.S.A., Inc.*, 868 F.2d 1251, 1257 (Fed. Cir. 1989); *see also Applied Materials, Inc. v. Advanced Semiconductor Materials Am., Inc.*, 98 F.3d 1563, 1572–73 (Fed. Cir. 1996). Specifically, “[i]f the claim preamble, when read in the context of the entire claim, recites limitations of the claim, or, if the claim preamble is ‘necessary to give life, meaning, and vitality’ to the claim, then the claim preamble should be construed as if in the balance of the claim.” *Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1305 (Fed. Cir. 1999). “[T]he preamble constitutes a limitation when the claim(s) depend on it for antecedent basis . . . .” *C.W. Zumbiel Co., Inc. v. Kappos*, 702 F.3d 1371, 1385 (Fed. Cir. 2012) (citing *Catalina Marketing Int’l, Inc. v. Coolsavings.com, Inc.*, 289 F.3d 801, 808 (Fed. Cir. 2002)).

Here, no meaningful distinction exists between the claims’ preambles and the bodies of the claims—the preambles necessarily give meaning and vitality to the claims and are limiting. That meaning centers on, as explained above, a system to test whether an application written for a mobile device works by using emulated, rather than physical, real-world, versions of the mobile devices for which the application is written. Absent the preambles, the asserted claims lose their context. Likewise, the preambles provide antecedent support for later claim limitations. Wapp ignores all of this, taking no position on whether the preambles are limiting or how they should be construed, instead only attacking Defendants’ word choice of their proposed constructions.

The preamble to claim 1 of the ’864 patent is representative of the preamble limitations, and that claim provides in full:

A system for testing **an application** for **a mobile device** comprising:

software configured to simulate, via one or more profile display windows, a plurality of network characteristics *indicative of performance* of **the mobile device** when executing **the application**; wherein the network characteristics are based on data of interaction with networks in non-simulated environments.

'864 Patent at Cl. 1 (emphases and highlighting added). As reflected in the highlighting, the preamble provides the antecedent basis for "application" and "mobile device," and it is therefore limiting. *Zumbiel*, 702 F.3d at 1385.

Moreover, the construction of any term begins with an examination of the claim language itself. *Renishaw PLC v. Marposs Societa' per Azioni*, 158 F.3d 1243, 1248 (Fed. Cir. 1998) ("[T]he claims define the scope of the right to exclude; the claim construction inquiry, therefore, begins and ends in all cases with the actual words of the claim."). Here, the claim language provides that the system is "*indicative* of performance of the mobile device." The performance is merely "indicative" because the alleged invention relies on emulated mobile devices, as opposed to real-world, physical mobile devices. *See generally* '678 Patent at Cls. 1, 26, 45; '864 Patent at Cl. 1; '192 Patent at Cl. 1. Wapp itself fully admits this, stating in its technology tutorial: "The patents are directed to systems and methods for developing and testing mobile applications or mobile apps. They do this by emulating mobile devices and how the app will play on a given device without loading up the app onto an actual phone." Wapp Tech Tutorial at 0:26–0:41.

The specifications also demonstrate that the alleged invention covers testing an application using an emulated mobile device, not on a real-world, physical device. The Background of the patents, for example, explains that application development prior to the patents required an author to transfer and play the application hundreds of times (development life cycles) on the targeted mobile device. '864 patent at 1:60–64. Given this requirement, the patents disparage the use of real-world, physical devices because they are both time-consuming and costly. *Id.* at 2:1–2. The

inventor expressly recognized these costs in his provisional application, explaining that “application development burn rate and the need to buy each addressable handset” were “two of the most adverse variables for the [] developer.” Prov. App. No. 60/689,101 (“the ’101 Provisional”) (attached hereto as Ex. A) at 3. As such, the patents teach that by using emulated devices, rather than real-world, physical devices, the developer avoids “purchasing a mobile device (\$100-200 dollars).” ’864 patent at 13:40–41. Likewise, the patents teach that using emulated mobile devices “allow[s] application development to start before a physical device is available.” *Id.* at 6:10–21; *see also* 10:40–50 (similar). Courts have found that where a patent’s specification clearly and consistently disparages a particular embodiment, that embodiment is disavowed. *See Openwave Systems, Inc. v. Apple, Inc.*, 808 F.3d 509, 514 (Fed. Cir. 2015); *Poly-America, L.P. v. API Indus., Inc.*, 839 F.3d 1131, 1136 (Fed. Cir. 2016); *Indivior Inc. v. Dr. Reddy’s Labs., S.A.*, 752 F. App’x 1024, 1030–34 (Fed. Cir. 2018). Here, the patents unambiguously disparage the use of real-world, physical mobile devices because of their cost both in terms of dollars and time, and thus disavow physical devices from the scope of the claims.

The patents also exclusively and consistently teach the use of emulated mobile devices.

This teaching begins with the Abstracts, which state, for example:

A system, method and software product *emulate* and profile an application playing on a mobile device. ***The mobile device is emulated*** using a model based upon characteristics related to performance of the mobile device. The application is played and monitored within the model to determine resource utilization of the application for the mobile device.<sup>4</sup>

Every embodiment disclosed in the Summary of the Invention also teaches emulation:

- “The mobile device is *emulated*” 2:14;
- “the mobile device is *emulated*” 2:21;
- “an *emulator* profiles an application of a mobile device” 2:34–35; and

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<sup>4</sup> Unless otherwise noted, all emphases are added.

- “one or more mobile devices to be *emulated*” 2:43–44.

Similarly, every embodiment in the Detailed Description of the Figures uses emulated mobile devices, beginning with the embodiment shown in FIG 1A, which shows “[s]ystem 100” with an “emulator 101”; where “[e]mulator 101 generates a mobile device model based upon characteristics 115 of mobile device 114. Model 102 emulates mobile device 114 to play frame-based application 104 . . . .” ’864 patent at 3:66–4:11. Indeed, the ’864 specification expressly limits each embodiment to emulators: “*In all embodiments described herein*, it is to be noted that emulation is performed on a processor extrinsic to the mobile device being emulated.” *Id.* at 6:38–41. Consistent with that limitation, each of the flowcharts showing the steps of the methods of the alleged invention includes the use of an emulated mobile device. *See, e.g.*, FIG. 6 (“EMULATE THE MOBILE DEVICE”), FIG. 7 (“PLAY THE APPLICATION WITHIN AN EMULATION OF THE MOBILE DEVICE”), FIG. 13 (step 1308).

As explained, the Federal Circuit has made clear that a uniform and consistent depiction of the invention, together with disparaging statements regarding alternatives, requires limiting the claims to the embodiment disclosed. *See, e.g., In re Abbott Diabetes Care Inc.*, 696 F.3d 1142, 1149–50 (Fed. Cir. 2012). Such is the case here. The claims, the abstracts, and the specifications all confirm one thing: Mr. Poulin’s allegedly novel insight was that it was challenging to test applications on numerous different physical devices, and so instead, developers should test their applications on *emulated* devices. To the extent the claims possess “life, meaning, or vitality,” the preamble passes that on to the body of the claims, and Defendants’ construction of the preamble properly captures that meaning.

## 2. None of Wapp’s Arguments Supports a Different Construction

While Wapp takes no clear position on what Mr. Poulin allegedly invented, it appears Wapp agrees that the alleged invention requires the use of modeled—as opposed to actual—

devices. Indeed, in its Overview of the Patents In Suit, Wapp states: “The patents in suit are directed to methods and apparatuses for mobile app development with *device* and network *simulation*.”<sup>5</sup> Dkt. 154 at 1. Wapp further explains that “[t]he application is played (executed) in real time within the *model* . . . .” *Id.* at 2. And in the next paragraph Wapp acknowledges the patents teach that it is useful to model resource usage “without needing to actually load the application on the device (or many such devices).” *Id.* As discussed above, Wapp’s technology tutorial submitted in this case further acknowledges that the alleged invention is directed to testing done on *emulated* devices. Wapp Tech Tutorial at 0:26–0:41.

Wapp argues that Defendants improperly try to read the phrase “mimics the operation of” into the preamble, and that the “recited phrases here do not involve ‘emulating the operation of’ a mobile device[, but rather involve] ‘testing’ and ‘developing’ an application for a mobile device.” Dkt. 154 at 6–7. Wapp’s argument misses that the preamble phrases are a “*system* for testing” and a “*system* for developing.” *See Network Commerce Inc. v. Microsoft Corp.*, 422 F.3d 1353, 1360 (Fed. Cir. 2005) (en banc) (declining to interpret words of a phrase in isolation). As explained above and as the parties agree, the claimed system for testing or developing applications for a mobile device does not occur in a vacuum; it requires emulating, or mimicking, the real-world version of that mobile device—as reflected in Defendants’ construction.

Wapp also appears to draw some sort of distinction between an emulated mobile device and a modeled mobile device, arguing that Defendants’ construction excludes modeled mobile devices. Dkt. 154 at 7. Yet Wapp never explains what difference, if any, exists between an emulated and modeled device. In fact, according to the patents, the “model” is a part of the

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<sup>5</sup> Wapp appears to contend that the terms “emulation” and “simulation” are synonymous and used interchangeably throughout the patents. Defendants disagree. Nonetheless, in its statement above, Wapp concedes that the patents use simulated, rather than real-world, devices.

“emulator.” *See, e.g.*, ’864 patent at FIGS 1A, 1B, and 2; *id.* at 4:3–5 (“Emulator 100 generates a mobile device model 102, based on characteristics 115 of mobile device 114.”). In any case, Wapp’s argument supports Defendants’ position: Whether the mobile device is modeled, emulated, or mimicked, the point is that it is not a real-world, physical device.

Wapp also raises narrow and confused challenges to the specific words used in Defendants’ construction, while never providing an alternative construction of its own. For example, Wapp argues that “real-world mobile device” in Defendants’ construction requires the device to have been actually released. This is incorrect. Defendants use “real world” to contrast a physical version of a device (whether or not it has been released or even manufactured) as opposed to an emulated device. However Wapp wants to describe the underlying tangible mobile devices—real-world mobile devices; real devices; physical devices; real, physical mobile devices; etc.—the point is that the claimed systems require the applications be tested on emulated devices.

Finally, Wapp complains that Defendants equate “testing” with “evaluation” and “developing” with “writing.” Again, Wapp provides no explanation that addresses whether the different words make a difference. Wapp just blankly complains.

For all of the reasons discussed above, the preambles should be found to be limitations and should be construed as Defendants propose.

## **B. “Application”**

<b>Term</b>	<b>Defendants’ Construction</b>	<b>Wapp’s Construction</b>
“application” <sup>6</sup>	“program designed to run on a mobile device”	No construction necessary

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<sup>6</sup> ’678 Patent at Cls. 1, 26, 45; ’864 Patent at Cls. 1, 8, 12, 20, 29; ’192 Patent at Cl. 1.

As explained above, the alleged invention addresses development of applications written for mobile devices. This is confirmed by the titles of the asserted patents, which each include the phrase “mobile application development,” and is further confirmed by the abstracts of each patent:

- “A system and methods emulate an application executing in real time in a *mobile device*.” ’192 patent Abstract (emphasis added).
- “A system, method and software product emulate and profile an application playing on a *mobile device*.” ’864 patent Abstract (emphasis added).
- “A system and methods to emulate an application executing in real time in a *mobile device*.” ’678 patent Abstract (emphasis added).

Defendants’ construction reflects this core aspect of the alleged invention. Wapp appears to agree with the substance of Defendants’ construction. Indeed, in the last paragraph of its brief on this term, Wapp writes that Defendants’ construction is “redundant in view of the claim language” and that each claim “clarifies that the application is either ‘for a mobile device’ or ‘play[s] on’ a mobile device.” Dkt. 154 at 9.

# **1. The Claims and the Specifications Confirm that “Application” Refers to the Software Program Designed to Run on the Mobile Device**

“First, we look to the words of the claims themselves, both asserted and nonasserted, to define the scope of the patented invention.” *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996). Here, the claims make clear that the “application” being tested is a software program “for the mobile device”—*not* some other software program, such as the software programs incorporated within the “authoring environment” or running on a server. ’864 patent at 14:63–65; *see also id.* at 17:6–8 (similar). Indeed, as explained, the preamble of claim 1 of the ’864 patent provides this context, reciting: “A system for testing an application *for a mobile device* comprising . . . .” The same is true for the asserted claims for the ’192 and ’678 patents. *See, e.g.*, ’192 Patent at Cl. 1 (“A system for developing an application *for a mobile device*”); ’678 Patent at Cl. 1 (“A system for testing an application *for a mobile device*”). The preambles for claims 20

and 29 of the '864 patent confirm this context, requiring “emulating an application *playing on . . . [at least one] mobile device*.” The bodies of the claims rely on this context provided by the preambles. For example, '864 patent claim 1 requires simulating network characteristics “indicative of performance *of the mobile device when executing* the application.” That is, the emulated mobile device executes the application, and the system measures the performance of that emulated mobile device during that execution. *See* '864 Patent at Cl. 1; *see also, e.g.*, '192 Patent at Cl. 1 (similar); '678 Patent at Cl. 1 (similar).

The specifications are consistent with this.<sup>7</sup> As discussed, the alleged invention attempted to address the need to develop applications at a pace equal to that of mobile device launch. '864 Patent at 1:18–41. The figures and description in the specifications reveal how the inventor sought to address this need. For example, FIG. 1A shows the application 104 being loaded into the emulated mobile device 114, and FIG. 2 shows the application 104 stored in the non-volatile storage of the device model 102 of the emulated mobile device; in other words, the application is stored in the memory of the emulated mobile device. FIG. 4 shows an image representing the emulated mobile device, which includes a display area 402 that allows the developer “to see and interact with *an application running within device model 102*.” *Id.* at 8:40–41. The steps depicted in FIG. 6 show loading the application into (step 606) and playing the application within (step 608) the model of the emulated mobile device. FIG. 7 similarly teaches “play[ing] the application within an emulation of the mobile device.” The specification’s description of FIG. 8 shows the same application 104 loaded into the memory of the device model 102 of the emulated mobile device 101: “Thus, as application 104 plays within model 102, the effects of mobile device 114

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<sup>7</sup> “Importantly, the person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification.” *Phillips*, 415 F.3d at 1313.



interacting with a wireless network are simulated . . . .” *Id.* at 10:60–65. Consistent with these (and other) figures, the specification describes a system for emulating an “application [] playing on a[n emulated] mobile device.” ’864 patent at 3:66–4:1. The mobile device model “emulates mobile device 114 to play frame-based application.” *Id.* at 4:3–4:11. “Profiler 106 monitors playing of frame-based application 104 within [mobile device] model 102<sup>8</sup> to estimate resource usage of application 104.” *Id.* at 4:28–33. The uniform descriptions provided by the figures and specifications confirm that the “application” is a program designed to run on a mobile device.

## 2. **Wapp Does Not Appear to Dispute that the Application Is the Software Program Running on the Mobile Device**

While Wapp asserts that no construction is necessary, it does not appear that Wapp actually disagrees with Defendants’ construction. As discussed above, Wapp writes that Defendants’ construction is “redundant in view of the claim language” and that each claim “clarifies that the application is either ‘for a mobile device’ or ‘play[s] on’ a mobile device.” Dkt. 154 at 9.<sup>9</sup> While Defendants agree, as explained above, that the claim language supports their construction, the construction is not redundant. Nor do the dictionaries in Wapp’s Exhibit 4 support Wapp’s assertion that a POSITA and lay factfinder would readily understand the term. To the contrary, Wapp’s dictionaries say nothing about an application being a program designed to run on a mobile device. The Modern Dictionary of Electronics, cited by Wapp, defines “application” as “[t]he use of a computer for a specific purpose” and a “[s]ystem or problem to which a computer is applied.” Likewise, the Microsoft Computer Dictionary, also cited by Wapp, defines “application” as “[a]

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<sup>8</sup> Model 102 refers to “mobile device model.” *See* ’864 Patent at 4:4.

<sup>9</sup> This is further confirmed by Wapp’s introductory remarks in its tech tutorial, in which it states: “The patents are directed to systems and methods for developing and testing **mobile applications or mobile apps**. They do this by emulating mobile devices and how the app will play on a given device without loading up the app onto an actual phone.” Wapp Tech Tutorial at 0:26–0:41.

program designed to assist in the performance of a specific task, such as word processing, accounting, or inventory management.” The claimed “application” is more specific than these dictionaries provide, and the constructions should reflect that agreed specificity.

Wapp’s remaining two arguments do not present a substantive disagreement. Wapp complains Defendants improperly equate an “application” with a “program.” Dkt. 154 at 9. But Wapp does not explain the difference, and Wapp’s own cited dictionaries define “application” as “program.” Wapp also complains that Defendants’ definition refers to “run[ning]” an application, whereas the specification sometimes refers to “play[ing]” an application. Again, Wapp provides no explanation for why “playing” an application is different from “running” an application. If it helps resolve the dispute, Defendants are amendable to replacing “run” with “play.”

Wapp effectively concedes that Defendants’ construction is required by the claim language, and Wapp does not offer any alternative construction. Respectfully, the Court should adopt Defendants’ construction.

### C. “Emulate” and “Simulate” (*passim*)

Term	Defendants’ Construction	Wapp’s Construction
“emulate” ( <i>passim</i> )	“mimic”	No construction necessary
“simulate” ( <i>passim</i> )	“imitate”	No construction necessary

Defendants’ proposed constructions reflect the plain meanings of “emulate” and “simulate,” as evidenced by the intrinsic record, technical dictionaries, and the unrebutted opinions of Defendants’ expert, Dr. Shoemake. Wapp’s effort to avoid a construction leaves the jury without a guide for these nuanced technical terms and fails to resolve the parties’ dispute.

#### 1. Defendants’ Constructions Correctly Reflect that “Emulate” Refers to a More Precise Representation than “Simulate”

Being different words, “emulate” and “simulate” are presumed to mean different things in the context of the claims. *E.g.*, *Bd. of Regents of the Univ. of Texas Sys. v. BENQ Am. Corp.*, 533

F.3d 1362, 1371 (Fed. Cir. 2008) (“Different claim terms are presumed to have different meanings.”). Yet their differences are not clear to a layperson, and nowhere does Wapp give a definition of the two words or explain how they are different. *See generally* Dkt. 154 at 10–13. Just the opposite, Wapp’s discussion of these two terms appears to conflate them. *Id.* at 12–13.

As Dr. Shoemake explains, to a person of skill in the art, these terms differ in the level of precision they represent a “target” (*e.g.*, a device or a condition). Shoemake Decl. (Dkt. 154-6), ¶¶ 36, 44–45. A POSITA would have understood that “emulate” refers to a relatively precise representation, while “simulate” would refer to a relatively imprecise representation. *Id.* ¶¶ 36, 44–45. For this reason, Dr. Shoemake agreed that “mimic,” which connotes a more precise representation, accurately reflects the meaning of “emulate,” and “imitate,” which connotes a less precise representation, accurately reflects the meaning of “simulate.” *Id.* ¶¶ 36, 44–45.

The asserted patents reflect this distinction, consistently using “emulate” and “simulate” (and their variations) differently. *Irdeto Access, Inc. v. Echostar Satellite Corp.*, 383 F.3d 1295, 1300 (Fed. Cir. 2004) (“[T]he specification may define claim terms by implication such that the meaning may be found in or ascertained by a reading of the patent documents.” (internal quotation marks and citation omitted)); *Phillips*, 415 F.3d at 1321 (“[T]he ‘ordinary meaning’ of a claim term is its meaning to the ordinary artisan after reading the entire patent.”).

With respect to “emulate,” as explained, the alleged invention purportedly sought to allow a mobile application developer to test how an application would play on a device without needing the real-world, physical device. ’864 patent at 1:51–2:2. For a developer to test the application using an emulated device, the emulated device requires a high degree of fidelity to the real device, otherwise the test would not have meaningful results. Consistent with Defendants’ proposed construction, the patents’ solution to the purported problem is an emulator described as enabling

“interact[ion] with emulated mobile device display 111 to control application 104 *as if application were running on mobile device 114.*” ’864 patent at 8:1–3; *see also id.* at 15:39–43 (“Emulator 1510 may operate such that emulated mobile device display 1548, network display 1554 and application display 1552 for each emulated device model 1512 appears to operate substantially in real time (i.e., as if application 1506 is actually running on the mobile device being emulated)”).

Likewise, the patents describe the emulation of a target mobile device based on specific “mobile device characteristics,” such as those identified in Table 1 for the Nokia 3650. ’864 patent at 5:36–38. A POSITA would have recognized that Table 1 precisely captures the characteristics of the mobile device; it provides several detailed characteristics and specifies them with a high level of precision. Shoemake Decl., ¶¶ 39–40. As for the output, the patents disclose that a profiler monitors the application being played within the model to estimate resource usage against available resources and to generate the profile data display. ’864 patent at 4:28–33. Dr. Shoemake explains that these outputs are similarly detailed and, as such, they require the emulation to provide a precise representation of the target. Shoemake Decl., ¶ 41. The estimated profile data is, in turn, critical to the patents’ purported solution—it is used to determine whether an application will play correctly or if it will “crash” while playing on the target mobile device. ’864 patent at 8:14–30.

In contrast, the patents use the word “simulate” for relatively imprecise representations. The patents describe that “network characteristics” can be “simulated.” ’864 patent at 11:51–52. The simulated “network characteristics” are relatively high-level characteristics used to simulate the network; the patent refers to these as “scripted events,” “consumer events,” or “incoming events.” Shoemake Decl., ¶ 46; ’864 patent at 11:52–58. A “consumer event” can be further specified with the requirements “check messages” and “send message.” ’864 patent at 11:58–67. A POSITA would have understood that the “check messages” and “send message” requirements

represent the “consumer event” with relatively imprecise characteristics, as opposed to the characteristics that define an emulated mobile device. Shoemake Decl., ¶ 46. Indeed, the patents uniformly refer to *emulating* the hardware and *simulating* the network characteristics.<sup>10</sup>

The extrinsic record further supports Defendants’ proposed constructions. For example, the Wiley Electrical and Electronics Engineering Dictionary defines “emulator” as “[c]omputer hardware and/or software which is designed to work *exactly like another*,” whereas it defines “simulation” as “[a]n imitation, model, or other representation of an object, situation, process, feature, manner of operation, or the like.” *Wiley Electrical and Electronics Engineering Dictionary* 256 (2004) (emphasis added) (Dkt. 154-6 at pp. 65–68). Numerous other dictionaries similarly show that “emulate” and “simulate” differ in how precisely a target is represented. Shoemake Decl., ¶¶ 43, 47. Dr. Shoemake further explains that his personal experiences with simulators and emulators designed by TI are consistent with Defendants’ proposed constructions. *Id.* ¶ 48. The simulators “could be used in the early development process when relatively high-level modeling and testing sufficed,” but “when we needed a more detailed, real-world representation of performance of software,” they would test the applications on an emulator. *Id.*

## 2. Wapp’s Refusal to Construe the Terms Is Erroneous, and Its Criticisms of Defendants’ Proposed Constructions Are Misplaced

Wapp fails to propose its own constructions, choosing instead to attack Defendants’

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<sup>10</sup> The only exception to this is claim 1 of the ’192 patent, which refers to visually *emulating* a plurality of *network characteristics*. Importantly, that claim originally required visually emulating a plurality of *hardware* characteristics, and the applicant made a last-minute change to replace “hardware” with “network.” See Oct. 17, 2014 Amendment after Allowance (modifying then-numbered claim 44) (Ex. B); Oct. 17, 2014 Remarks after Allowance (requesting that then-numbered claim 44 be renumbered to claim 1) (Ex. C). Given the consistency of the specification as well as the other claims of the asserted patents, it appears that the attorney forgot also to change “emulate” to “simulate” when “hardware” was replaced with “network.” Indeed, there would be no written description in the specification for emulating network characteristics.

proposed constructions, while also making clear that it wants to use the terms interchangeably, and ignoring both their different use in the patents and the Federal Circuit’s presumption that different terms have different meanings. Here, the specification confirms that presumption.

As discussed above, the precise meanings of and differences between emulators and simulators in the computing context are nuanced and technical, and they would not be understood by a lay juror. *See, e.g., Intervet Inc. v. Merial Ltd.*, 617 F.3d 1282, 1287 (Fed. Cir. 2010) (reasoning that, among other things, “highly technical terms” are “best understood by reference to the specification”). But Wapp cites only to *non-technical thesauruses and dictionaries* in its effort to equate the two terms. *See* Wapp Ex. 8. In doing so, Wapp avoids the technical nature of these terms, and even more troublingly fails to account for what the patents disclose. While Wapp argues that the specification does not provide an express definition of “simulate” and “emulate” (Dkt. 154 at 11), Wapp makes that argument by neglecting the specifications entirely; indeed, Wapp fails to cite the specifications even once in the four pages it devotes to these terms. *See, e.g., Phillips*, 415 F.3d at 1313 (“[T]he ‘ordinary meaning’ of a claim term is its meaning to the ordinary artisan after reading the *entire patent*.” (emphasis added)); *id.* at 1316 (“The construction that stays true to the claim language and most naturally aligns with the *patent’s description* of the invention will be . . . the correct construction.” (emphasis added)); *ICU Med., Inc. v. Alaris Med. Syst., Inc.*, 558 F.3d 1368, 1373 (Fed. Cir. 2009) (“Thus not only is the written description helpful in construing claim terms, but it is also appropriate ‘to rely heavily on the written description for guidance as to the meaning of the claims.’”). Here, Wapp failed to rely on the written description at all, and that is error.

Wapp’s criticisms of Defendants’ construction are equally misplaced. The fact that Dr. Shoemake agrees with Defendants’ constructions does not make his analysis conclusory, and Dr.

Shoemake repeatedly addressed the intrinsic record throughout his declaration. *See* Shoemake Decl., ¶¶ 8–27; *cf.* Dkt. 154 at 11 (quoting *SkinMedica, Inc. v. Histogem Inc.*, 727 F.3d 1187, 1210 (Fed. Cir. 2013)). Wapp’s argument that the specification provides no express definition (Dkt. 154 at 11) underscores the point—the absence of an express definition, absent reference to the specification, leaves unanswered the question of how a person of skill in the art would understand “simulate” and “emulate” in the context of these patents. Dr. Shoemake, based on a detailed study of the patents’ specifications, provides the answer.

Wapp also criticizes Dr. Shoemake’s opinion as being inconsistent with the technical dictionaries. As support, Wapp includes Exhibit 7, which is a chart showing certain definitions of “emulate” and “simulate” in various technical dictionaries. All Wapp has shown is that the differences between “emulate” and “simulate” are subtle, the terms can be used imprecisely, and claim construction is particularly necessary here; not that there are no differences. *Bd. of Regents of the Univ. of Texas Sys.*, 533 F.3d at 1371 (“Different claim terms are presumed to have different meanings.”). Wapp attempts to take Dr. Shoemake to task for failing to consider any thesauruses (Dkt. 154 at 12), but Wapp’s argument in fact demonstrates its flawed approach to claim construction. The point is not to provide a one-to-one replacement of synonymous words. The point of claim construction is to provide *meaning* to words or phrases as would be understood by a person of ordinary skill in the art at the time of the invention. *Phillips*, 415 F.3d at 1313–14. Wapp’s concluding attempt to criticize Dr. Shoemake at page 13 of the brief (“Dr. Shoemake flatly admitted at deposition that ‘emulate’ and ‘simulate’ should be given their plain and ordinary meaning as understood by a POSITA”) is equally misplaced, because the whole point of Dr. Shoemake’s analysis is to elucidate *what* the plain and ordinary meanings of the terms were to a person of skill in the art at the time of the invention.

At bottom, Dr. Shoemake’s analysis is correct, and Wapp does not attempt to dispute it. In this technology space, the key difference between “emulate” and “simulate” is in the emulator’s/simulator’s level of precision towards the target device. An emulated device has a relatively higher degree of fidelity towards the target device; a simulated device has less fidelity. Shoemake Decl., ¶¶ 36, 44–45. To capture this subtle distinction for the benefit of a lay jury, Defendants propose “mimic” for “emulate,” and they propose “imitate” for “simulate”—“mimic” implying a higher degree of fidelity than “imitate.” Nowhere does Wapp disagree with Dr. Shoemake’s insight, nor does Wapp propose words that better capture the subtle yet important distinction between the two words. As such, Defendants’ construction should be adopted.

#### **D. Visual Simulation Limitations**

The limitations listed below, while varying slightly in their individual language, are directed to the same claimed features and should be construed together. Defendants refer to these limitations collectively as the “visual simulation” limitations and propose the following constructions:

<b>Term</b>	<b>Defendants’ Construction</b>	<b>Wapp’s Construction</b>
“simultaneously visually simulate [or emulate], via one or more profile display windows” <sup>11</sup>	“imitate, while at the same time displaying one or more windows showing in real time resources of the mobile device that are available to the application as a result of the imitated activity”	No construction necessary
“simulate, via one or more profile display windows” <sup>12</sup>	“imitate, and make available for display one or more windows showing resources of the mobile device that are available to the application as a result of the imitated activity”	No construction necessary

<sup>11</sup> ’678 patent at Cls. 1, 26, 45; ’192 patent at Cl. 1. Defendants have updated their proposed construction from the P.R. 4-3 disclosure for claim 1 of the ’192 patent. As explained in footnote 10 above, “emulate” here should be construed as “simulate” based on the drafting error.

<sup>12</sup> ’864 patent at Cl. 1.



## **1. The Claim Language Must Be Construed**

These phrases jumble several technical terms, *i.e.*, simulate, emulate, and profile display window, together with the adverbs visually and simultaneously. As written, the phrases have no ordinary meaning apart from the patents. Shoemake Decl., ¶ 52. For example, a “display window” can present a visual output to a user on a computer screen, but it is not a method of emulation or simulation. *Id.* In other words, “visual emulation” and “visual simulation” are not recognized terms of art. *Id.* Likewise, absent reference to the patents’ specifications, a person of skill in the art would not know what is meant by “simultaneously visually” emulating or “simultaneously visually” simulating. *Id.* Rather than consider these phrases as specific, integrated requirements of the claims, Wapp again erroneously focuses on the individual words in isolation to avoid construing the phrase. *See Network Commerce*, 422 F.3d at 1359–60 (combining individual dictionary definitions is not a tenable theory of construction in light of the specification). Wapp’s effort to evade construction of these confusing and technical phrases should be rejected; instead, Defendants’ constructions should be adopted.

## **2. Defendants’ Constructions Are Correct**

As Dr. Shoemake explains, a person of skill in the art, after studying the entire intrinsic record, would understand that these claim limitations require a window that displays the emulated mobile device’s resource availability as that device plays the mobile application and is subjected to simulated network events. This understanding reflects the inventor’s purported solution to address the need to develop applications for the many different mobile devices—each having varied resources—rapidly being released into the market.

As explained above, and as the patents’ specifications reflect, to avoid the expense and time associated with testing the applications on real-world, physical devices, Mr. Poulin proposed emulating the mobile devices. He further proposed a “profiler” that monitored the mobile device’s

resources being consumed by the application and showing that resource consumption via a “profile data display window.” ’864 patent at 4:28–33. Finally, recognizing that mobile devices operate on mobile networks and that operating on the mobile network also consumes mobile device resources, Mr. Poulin proposed simulating events associated with the network, such as receiving a message or phone call, while playing the application, to determine whether the reduction in available mobile device resources would cause the device to crash as the application played. *See, e.g., id.* at 10:8–16, 10:53–65, 11:2–6. While the specifications do not teach how to implement these features, other than to buy mobile device emulators and network simulators, his claims—particularly the disputed claim phrases—reflect these concepts: (1) play an application on (2) an emulated mobile device while (3) simulating mobile network events and (4) display in a window the overall resource availability of the mobile device based on the network events.

Viewed in this light, it is clear that what the claims meant was not that the profile display window would *do* the emulation or simulation. Rather, the patents disclose that the *system* would perform the emulation or simulation, and the results of the simulation or emulation would be visually presented in the profile display window; that is, the profile display window would visually show the resources consumed by the application and mobile network, against total available resources, at a given point in time. Defendants’ constructions faithfully reflect these requirements.

Finally, two of Defendants’ proposed constructions include a “real time” requirement. This limitation comes directly from the claim language, which requires “simultaneous” visualization and emulation/simulation. ’678 Patent at Cls. 1, 26, 45; ’192 Patent at Cl. 1. To say that the emulation or simulation must occur simultaneously with the display of the resource information is to say that the display must happen in real time; that is, the resource availability of the mobile device is displayed as the emulated mobile device is playing the application and is subjected to the

simulated network events. Shoemake Decl., ¶ 51. Notably, and to reflect the alternative embodiments disclosed in the patents, the “real time” requirement is not included in Defendants’ proposed construction for claim 1 of the ’864 patent, which does not have the “simultaneous” requirement. Shoemake Decl., ¶ 56. Those alternative embodiments are exemplified in the following passage (“real time” versus an “output as a report”):

In one example of operation, application player 154 plays application 104 within model 102. In particular, player 154 processes frames 223 of application 104 based upon ordering of frames 223 within timeline 222. One or more profiled modules 202, 204, 206 and 208 within profiler 106 monitor resource utilization of each frame, storing results as profiled data 152. Profiled data 152 is then displayed as profiled data display window 110 on display 140 for review by the user. Profiled data 152 *may be displayed in real time as application 104 is played* within model 102. Alternatively, the user may scroll through profiled data 152 as desired by interacting with profile data display 110. Alternatively, profiled data 152 *may be output as a report* (not shown).

’864 patent at 7:56–8:1. Thus, Defendants’ construction faithfully reflects the words used in the claim together with the context provided those words by the specification.

### 3. Wapp’s Criticisms of Defendants’ Constructions Are Meritless

Wapp takes the position that nothing about the words used in the claim limitations or “the way they are strung together” requires construction because their meaning is, supposedly, clear to a layperson. *See* Dkt. 154 at 14. But in so arguing, Wapp carefully avoids stating what the overall claim limitations require or providing any evidence that contradicts the specifications or Dr. Shoemake’s declaration. *Cf. Power Integrations, Inc. v. Fairchild Semiconductor, Int’l, Inc.*, 711 F.3d 1348, 1361–62 (Fed. Cir. 2013) (court rejected patentee’s argument of “plain and ordinary” where patentee failed to offer evidence that contradicted the testimony of the defendant’s expert). As discussed above, the complete phrases have no meaning to one of skill in the art absent a careful analysis of the specification together with the phrases as a whole in the context of the overall claim.

Focusing on the individual words or phrases in isolation, Wapp argues that each of the disputed claim phrases is sufficiently clear. But as discussed above, the problem with the claim limitations is that they have no recognized meaning when viewed in their entirety, and the individual words of the phrases viewed in isolation do not help. *Cf. Network Commerce Inc.*, 422 F.3d at 1360 (declining to individually interpret single words of a phrase). Profile display windows do not emulate or simulate things, and “visually” is not a method of emulation or simulation. Wapp’s narrow, word-by-word or phrase-by-phrase analysis avoids the question of how a POSITA would understand these phrases.

Setting aside that flaw, Wapp’s narrow analysis is itself wrong. Wapp argues that the “via one or more profile display windows” is readily understood and that profile display windows are discussed in FIGS. 9–12. As the specification makes clear, however, FIGS. 9–12 are *not* profile display windows; they are “user interface screens for interacting with the emulator.” ’864 patent at 3:8–11. FIG. 3 is a profile display window. ’864 patent at 4:28–33; *id.* at 8:4–30 (“FIG. 3 shows one exemplary *profile data display window* 110 showing a frame-based display of profiled data 152.”). And as FIG. 3 illustrates, profile display window 110 displays the application’s utilization of resources of the emulated mobile device. *Id.* at 8:23–27 (“Profile window 110 displays per-frame (or point-in-time) processor resource utilization of application 104, thereby facilitating assessment of stresses applied to mobile device 114 when playing application 104.”). Tellingly, Wapp ignores FIG. 3 entirely in its brief. While the profile data display window may appear in a larger user interface screen, the specification never refers to the overall user interface as a “profile display window.” Likewise, and also contrary to Wapp’s arguments (*see* Dkt. 154 at 15), the patents never refer to a “pull-down menu” as an exemplary *profile display* window; rather the patents describe a “window” that shows a pull-down list 1202 of network characteristics, which

is displayed in a separate part of the user interface screen from the profile display window. *See* FIG. 12; '864 patent at 11:51–52.

Similarly, Wapp argues that the proposed construction reflecting “resources of the mobile device that are available to the application as a result of the imitated activity” is too narrow because it excludes embodiments in which the system is tracking resources *used by* the application, instead of resources *available to* the application. Wapp is incorrect. The specifications disclose tracking and displaying the resources *used* by the application and the resources *available* to the application. However, *these limitations* are directed to displaying the resources *available* to the application.

The patents are clear that simply knowing resource utilization does not tell the developer whether the mobile device will crash; the developer needs to know the *total available* resources in order to know whether the resources used are too high. This is explained in the patents repeatedly:

- “In one embodiment, capacity line 308 in profile data display window 110 is dynamically modified to show actual resource *availability* to application 104 resulting from resource utilization by simulated wireless network activity within device model 102.” '864 patent at 10:65–11:2 (emphasis added).
- “[I]f a message is received and/or retrieved by model 102 while playing application 104, certain resources are required to handle the received message, and therefore *available* resources for application 104 is reduced accordingly.” *Id.* at 11:2–6 (emphasis added).
- “A user may interact with one or more of frame based profile data displays 1544 of device model 1512 to modify resources *available* to application 1506.” *Id.* at 15:61–63 (emphasis added).
- “A capacity line 2108 indicates the maximum total resources *available* to application 104. Where bars 2104 rise above capacity line 2108, resource utilization for indicated frames of application 104 exceed the *available* resources of mobile device 114; thus application 104 may ‘capout’ or crash when playing those frames.” *Id.* at 20:48–54 (emphasis added).

That this limitation is directed to resources available to the application, rather than resources used by it, is evident from the claim language. What is “simulated” are network characteristics that affect (are “indicative of”) performance of the mobile device. *E.g.*, '864 patent

Cl. 1. As set forth above, the patents disclose that resource availability based on that simulation is displayed in the profile display window (e.g., as the “capout” line). This is the embodiment disclosed in the first bullet point above. The profile display window shows how resources “availabl[e] to the application” are affected by simulated wireless network activity. *Id.* at 10:65–11:2. There is no requirement in these claims that the *entire* profile display window in Figure 3 be displayed. Indeed, the claims containing these terms do not require tracking the resources used by the application. Instead, resource **utilization** is claimed by, e.g., claims 13 and 20 of the ’864 patent, which require that application performance and resource utilization also be displayed. As with its other arguments, Wapp fails to account for what is taught in the patents’ written description and what is included in the claim language itself. *Renishaw PLC*, 158 F.3d at 1248 (“[T]he claims define the scope of the right to exclude; the claim construction inquiry, therefore, begins and ends in all cases with the actual words of the claim.”); *see also Phillips*, 415 F.3d at 1315.

Finally, Wapp complains of Defendants’ inclusion of a “real time” requirement in the claim limitations. Dkt. 154 at 16. As discussed above, this requirement is a direct consequence of the “simultaneous” limitation in the claims. ’678 Patent at Cls. 1, 26, 45; ’192 Patent at Cl. 1. Notably, the “real time” requirement is not included in Defendants’ proposed construction for claim 1 of the ’864 patent, which does not have the “simultaneous” requirement.

#### E. “Configured to”

Term	Defendants’ Construction	Wapp’s Construction
“configured to” <sup>13</sup>	“actually programmed or implemented with hardware or software to”	No construction necessary

“Configured to” is a term of drafting art, much like “comprising,” “consisting of,” and “consisting essentially of.” *Radware Ltd. v. A10 Networks, Inc.*, No. C-13-02024-RMW, 2014

<sup>13</sup> ’192 Patent at Cls. 1, 2, 3; ’678 Patent at Cls. 1, 2, 3, 26, 45, 46; ’864 Patent at Cls. 1, 2, 8.

WL 1572644, at \*12 (N.D. Cal. Apr. 18, 2014) (recognizing “configured to” as a “patent term of art”). Courts have repeatedly confirmed that it has a narrow meaning compared to the broader phrase “capable of.” *E.g.*, *Aspex Eyewear, Inc. v. Marchon Eyewear, Inc.*, 672 F.3d 1335, 1349 (Fed. Cir. 2012) (interpreting “adapted to” and construing it in the “narrow” sense of “configured to” in contrast to the “broader” sense as “capable of”); *Typhoon Touch Techs., Inc. v. Dell, Inc.*, 659 F.3d 1376, 1380 (Fed. Cir. 2011) (construing “memory . . . configured to” as “memory that must perform the recited function”); *SIPCO, LLC v. ABB, Inc.*, No. 6:11-cv-48-LED-JDL, 2012 WL 3112302, at \*11 (E.D. Tex. July 30, 2012) (“[T]he claims mandate that the devices are ‘configured to’ perform particular functions. Interpreting ‘configured to’ as requiring only mere capability would eliminate any meaningful limits to the claims. Accordingly, the Court finds that ‘configured to’ means ‘actually programmed or equipped with hardware or software to.’”).

Given this, Defendants’ proposed construction matches the definition adopted by multiple courts in this district and elsewhere. *SIPCO*, 2012 WL 3112302, at \*11 (“Accordingly, the Court finds that ‘configured to’ means ‘actually programmed or equipped with hardware or software to.’”); *Polaris PowerLED Tech., LLC v. Samsung Elec. America Inc. et al.*, No. 2:17-cv-715-JRG (Dkt. No. 333), at \*3 (E.D. Tex. June 7, 2019) (similar). This construction is also consistent with how the patents use the term. *See* ’864 patent at 4:57–59 (“In another embodiment, emulator 101 is an add-in module that may be **configured to** operate within flash development tool 112.”) (emphasis added); *id.* at 14:59–65 (“Application developer 1504, emulator 1510 and network simulator 1520 may each be a part of authoring environment 1502, or may each be an external software program that is **configured to** cooperate with components of authoring environment 1502.”).

Wapp cites nothing suggesting a broader construction is uniquely required for these patents, nor does it propose its own construction. Instead, Wapp argues that the cases from which Defendants draw their definitions arise from different patents, and it attempts to distinguish the cases on that basis. Dkt. 154 at 16–18. Because “configured to” is a term of drafting art, the fact that the patents are different is irrelevant. Courts have repeatedly recognized that “configured to” has a narrow definition in patent law, and that fact may be lost on the jury absent a construction. *E.g.*, *Aspex Eyewear*, 672 F.3d at 1349; *Typhoon Touch*, 659 F.3d at 1380; *SIPCO*, 2012 WL 3112302, at \*11; *Polaris PowerLED*, No. 2:17-cv-715-JRG (Dkt. No. 333), at \*3. Wapp also argues that the claims in *SIPCO* and *Polaris* were described in functional terms, whereas Wapp’s claims are not. Dkt. 154 at 17–18. Here again, Wapp is wrong; a cursory review of the asserted claims shows that they are written in functional terms. *See, e.g.*, ’864 patent at Cl. 1 (“A system for testing an application for a mobile device comprising: software configured to simulate . . .”).

Defendants’ proposed construction accurately defines “configured to” consistent with settled case law interpreting the term. Wapp provides no definition of its own, and its criticisms of Defendants’ proposed construction are meritless.

#### **F. “The software”**

The term “the software,” as used in claims 2, 26, and 45–50 of the ’678 patent, is indefinite because it lacks an antecedent basis, which creates an unresolvable and important ambiguity in the claims. For example, Claims 1 and 2 of the ’678 patent state:

1. *A system* for testing an *application* for a mobile device comprising:  
*a software testing interface* configured to simultaneously visually simulate, via one or more profile display windows, a plurality of operator network characteristics including at least bandwidth availability indicative of performance of the mobile device when executing the application; wherein the bandwidth availability is based at least in part on bandwidth data predetermined from interactions between one or more mobile devices and at least one operator network.



2. The system of claim 1, wherein *the software* is configured to enable a user to select from one or more connection simulations for testing how well mobile content performs on the mobile device.

“The software” in claim 2 could reasonably be interpreted to refer to the overall software system (“a system”), the specific software interface (“a software testing interface”), or some other software module (*e.g.*, “the application”). The distinction is important. If “the software” refers back to the overall system, then nearly any configuration that enables selection of connection simulations could meet the claim limitation. But if “the software” refers specifically to the software testing interface, then it must be that specific, claimed software interface that allows the user to select the connection simulations.

Wapp argues that claims 1 and 2 of the ’864 patent resolve this issue; claim 1 of the ’864 patent requires “software configured to simulate,” and claim 2 of the ’864 patent refers to “the software” based on claim 1. Given this, Wapp argues “the software” of ’678 claim 2 must refer to “software testing interface” of ’678 claim 1. *See* Dkt. 154 at 19. Wapp’s argument is misplaced. First, the “software testing interface” of ’678 claim 1 must be something different than “software.” *Bd. of Regents of the Univ. of Texas Sys.*, 533 F.3d at 1371. Indeed, for the ’864 patent, the inventor chose to refer to “software” generally, whereas in the ’678 patent, the patentee narrowed the language to refer specifically to a “software testing interface.” “The software” of ’678 claim 2 must be something different than the software testing interface. Moreover, the lack of antecedent basis ambiguity is magnified for claims 47–49 of the ’678 patent. Those dependent claims require the software to “import real-world mobile network profiles”—activities that are rarely done by “interfaces,” which more frequently refer to the visual presentation of information.

Accordingly, “the software” as recited in claims 2, 26, and 45–50 of the ’678 patent fails to inform those skilled in the art about the scope of the invention with reasonable certainty. *See Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898 (2014) (holding that “a patent is invalid for

indefiniteness if its claims, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention”). Claims 2, 26, and 45–50 of the ’678 Patent are therefore invalid.

#### **G. “The test”**

The term “the test” as used in claim 9 of the ’864 patent is indefinite because it also lacks an antecedent basis. Specifically, the claim recites “the system of claim 8, wherein the one or more scenarios define one or more events that occur during the test which includes defining one or more virtual users to simulate real users.” However, neither claim 8 nor claim 1 (upon which claim 8 depends) recites any sort of “test” for which “the test” in claim 9 could reasonably depend.

Wapp argues that “the test” of claim 9 refers to “the test of the application recited in claim 1.” Dkt. 154 at 20. This is far from clear. Nowhere does claim 1 actually refer to a “test.” The closest it comes is the preamble, wherein it refers to a “system for *testing*.” But that vague reference does not provide the metes and bounds of the test itself. Without clearly identifying the “test,” it would be entirely unclear whether the limitations of claim 9 were met. That claim requires that certain events happen “during the test,” and without defining the scope of the test, it is unclear whether, for example, there has been a single test or a series of tests, and whether the event in question occurred during the same test or in an earlier, now-concluded test.

Accordingly, “the test” as recited in claim 9 of the ’864 patent fails to inform those skilled in the art about the scope of the invention with reasonable certainty. *See Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898 (2014). Claim 9 of the ’864 Patent is therefore invalid. *Id.*

#### **IV. CONCLUSION**

For the foregoing reasons, Defendants’ proposed claim constructions should be adopted.

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**CERTIFICATE OF SERVICE**

I hereby certify that on April 1, 2020, the foregoing was electronically filed with the Clerk of the Court using the CM/ECF system, which will send a notice of electronic filing to CM/ECF participants in this case.

*/s/ Mark Reiter*

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Mark Reiter